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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

# **Listing of Claims:**

1. (Currently amended) A nematicidal composition comprising:

(a) an effective amount of a compound having the formula

[[

or

or

]]

$$R_1$$
— $O$ — $C$ — $R_2$ 

wherein:

 $R_1 = H$ , a cation or a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, cyclopropane, epoxy and a substituted or unsubstituted C1-C2 carbon chain; and

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R<sub>2</sub> = a C15-C19 substituted or unsubstituted carbon chain having a *cis* or *trans* double bond between the 9<sup>th</sup> and 10<sup>th</sup> carbons counting from the carbonyl (C=O) carbon and either: (i) a triple bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon or (ii) either a single or double bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons and at least one substituent substituent at one or both of the 12<sup>th</sup> and 13<sup>th</sup> carbons, wherein the substituents substituents are selected from the group consisting of hydroxy, oxo, halogen, amino, cyano, azido, cyclopropene, epoxy and a substituted or unsubstituted C1-C2 carbon chain; and

(b) an aqueous surfactant.

### 2-3. (Canceled)

- 4. (Currently amended) The nematicidal composition of claim 1 wherein R<sub>1</sub> is a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, cyclopropane, epoxy and an unsubstituted C1-C2 carbon chain.
- 5. (Currently amended) The nematicidal composition of claim 1 wherein the C1-C2 carbon chain of one or both of R<sub>1</sub> and R<sub>2</sub> is substituted and the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, and epoxy.
- 6. (Currently amended) The nematicidal composition of claim 1 wherein the C1-C2 carbon chain of one or both of  $R_1$  and  $R_2$  is substituted and the substituents substituents are selected from the group consisting of: hydroxy, halogen, and amino.
- 7. (Previously presented) The nematicidal composition of claim 1 wherein  $R_1$  is a substituted C1 methyl.

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8. (Currently amended) The <u>nematicidal</u> composition of claim 1 wherein  $R_1$  is a C1-C2 substituted or unsubstituted carbon chain.

- 9. (Currently amended) The nematicidal composition of claim 1 wherein R<sub>2</sub> is a C15-C19 substituted or unsubstituted carbon chain having a *cis* or *trans* double bond between the 9<sup>th</sup> and 10<sup>th</sup> carbons counting from the carbonyl (C=O) carbon and either: (i) a triple bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon or (ii) either a single or double bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons and at least one substituent substituent at one or both of the 12<sup>th</sup> and 13<sup>th</sup> carbons, wherein the substituents substituents are selected from the group consisting of hydroxy, oxo, halogen, amino, cyano, azido, cyclopropane, cyclopropene, epoxy and an unsubstituted C1-C2 carbon chain.
- 10. (Currently amended) The nematicidal composition of claim 1 wherein the C1-C2 carbon chain of R<sub>2</sub> is substituted and the substituents substituents are selected from the group consisting of: hydroxy, oxo, halogen, amino, cyano, azido, and epoxy.
- 11. (Currently amended) The nematicidal composition of claim 1 wherein the C1-C2 carbon chain of R<sub>2</sub> is substituted and the substituents substituents are selected from the group consisting of: hydroxy, oxo, halogen, azido, and amino.
- 12. (Previously presented) The nematicidal composition of claim 1 wherein the C1-C2 carbon chain of  $R_2$  is singly substituted.

### 13-14. (Canceled)

15. (Previously presented) The nematicidal composition of claim 1 wherein  $R_2$  is substituted only at one or both of  $12^{th}$  and  $13^{th}$  carbons counting from the carbonyl (C=O) carbon.

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16. (Previously presented) The nematicidal composition of claim 15 wherein  $R_2$  is substituted only at the  $12^{th}$  carbon counting from the carbonyl (C=O) carbon.

- 17. (Previously presented) The nematicidal composition of claim 15 wherein  $R_2$  is substituted only at the 13<sup>th</sup> carbon counting from the carbonyl (C=O) carbon.
- 18. (Currently amended) The nematicidal composition of claim 15 wherein within R<sub>2</sub> the substituents substituents are polar and are selected from the group consisting of: hydroxy, oxo, epoxy, halogen, amino, cyano and azido.
- 19. (Currently amended) The nematicidal composition of claim 15 wherein within R<sub>2</sub> the substituents substituents are hydrogen bond acceptors and are selected from the group consisting of: hydroxy, oxo, epoxy, amino, cyano and azido.
- 20. (Currently amended) The nematicidal composition of claim 15 wherein within R<sub>2</sub> the substituents are selected from the group consisting of: hydroxy, oxo and epoxy.
  - 21. (Currently amended) A nematicidal composition comprising:
- (a) a fatty acid or salt or an ester or amide or aldehyde or ketone of a compound selected from the group consisting of: ricinoleic acid, ricinelaidic acid, 12-oxo-9(Z)-octadecenoic acid, 12-oxo-9(E)-octadecenoic acid, (12,13)-epoxy-trans-9-octadecenoic acid and vernolic acid; and
  - (b) an aqueous surfactant.
- 22. (Previously presented) The nematicidal composition of claim 1 or claim 21 wherein the aqueous surfactant is selected from the group consisting of: ethyl lactate, Span 20, Span 40,

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Span 80, Span 85, Tween 20, Tween 40, Tween 80, Tween 85, Triton X 100, Makon 10, Igepal CO 630, Brij 35, Brij 97, Tergitol TMN 6, Dowfax 3B2, Physan and Toximul TA 15.

- 23. (Previously presented) The nematicidal composition of claim 1 or claim 21 wherein the composition further comprises: (c) a permeation enhancer.
- 24. (Previously presented) The nematicidal composition of claim 23 wherein the permeation enhancer is a cyclodextrin.
- 25. (Previously presented) The nematicidal composition of claim 1 or claim 21 where the composition further comprises:
  - (c) a co-solvent.
- 26. (Previously presented) The nematicidal composition of claim 25 wherein the cosolvent is selected from the group consisting of: isopropanol, acetone, 1,2-propanediol, a petroleum based-oil and a mineral oil.
- 27. (Previously presented) The nematicidal composition of claim 1 or claim 21 further comprising a nematicide selected from the group consisting of: avermectins, milbemycin, aldicarb, oxamyl, fenamiphos, fosthiazate and metam sodium.
- 28. (Previously presented) The nematicidal composition of claim 1 or claim 21 further comprising an inhibitor of oxidation.
- 29. (Previously presented) The nematicidal composition of claim 28 wherein the inhibitor of oxidation is selected from the group consisting of: butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT).

Attorney's Docket No.: 12557-021001

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30. (Currently amended) The nematicidal composition of claim 1 wherein the composition comprises at least two different compounds having the formula

$$R_1$$
—0— $C$ — $R_2$ 

wherein:

 $R_1 = H$ , a cation or a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, cyclopropane, epoxy and a substituted or unsubstituted C1-C2 carbon chain; and

R<sub>2</sub> = a C15-C19 substituted or unsubstituted carbon chain having a *cis* or *trans* double bond between the 9<sup>th</sup> and 10<sup>th</sup> carbons counting from the carbonyl (C=O) carbon and either: (i) a triple bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon or (ii) either a single or double bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons and at least one substituant substituent at one or both of the 12<sup>th</sup> and 13<sup>th</sup> carbons, wherein the substituants substituents are selected from the group consisting of hydroxy, oxo, halogen, amino, cyano, azido, cyclopropane, cyclopropene, epoxy and a substituted or unsubstituted C1-C2 carbon chain.

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31. (Currently amended) A method for control of unwanted nematodes, the method comprising administering to a vertebrate, a plant, a seed or soil a composition comprising:

(a) a compound having the formula

$$R_1$$
— $O$ — $C$ — $R_2$ 

$$R_1 - N(H) - C - R_2$$

]]

$$R_1$$
— $O$ — $C$ — $R_2$ 

wherein:

 $R_1 = H$ , a cation or a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, cyclopropane, epoxy and a substituted or unsubstituted C1-C2 carbon chain; and

 $R_2$  = a C15-C19 substituted or unsubstituted carbon chain having a *cis* or *trans* double bond between the 9<sup>th</sup> and 10<sup>th</sup> carbons counting from the carbonyl (C=O) carbon and either: (i) a triple bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon or (ii) either a single or double bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons and at least one substituant

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<u>substituent</u> at one or both of the 12<sup>th</sup> and 13<sup>th</sup> carbons, wherein the <u>substituents</u> <u>substituents</u> are selected from the group consisting of hydroxy, oxo, halogen, amino, cyano, azido, cyclopropane, cyclopropene, epoxy and a substituted or unsubstituted C1-C2 carbon chain; and

(b) an aqueous surfactant.

32-33. (Canceled)

34. (Currently amended) The method of claim 31 wherein R<sub>1</sub> is a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, cyclopropane, epoxy and an unsubstituted C1-C2 carbon chain.

- 35. (Currently amended) The method of claim 31 wherein the C1-C2 carbon chain of one or both of  $R_1$  and  $R_2$  is substituted and the substituents substituents are selected from the group consisting of: hydroxy, halogen, amino, cyano, and epoxy.
- 36. (Currently amended) The method of claim 31 wherein the C1-C2 carbon chain of one or both of  $R_1$  and  $R_2$  is substituted and the substituents substituents are selected from the group consisting of: hydroxy, halogen, and amino.
- 37. (Previously presented) The method of claim 31 wherein  $R_1$  is a substituted C1 methyl.
- 38. (Previously presented) The method of claim 31 wherein  $R_1$  is a C1-C2 substituted or unsubstituted carbon chain.
- 39. (Currently amended) The method of claim 31 wherein  $R_2$  is a C15-C19 substituted or unsubstituted carbon chain having a *cis* or *trans* double bond between the  $9^{th}$  and  $10^{th}$  carbons

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counting from the carbonyl (C=O) carbon and either: (i) a triple bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon or (ii) either a single or double bond between the 12<sup>th</sup> and 13<sup>th</sup> carbons and at least one substituent substituent at one or both of the 12<sup>th</sup> and 13<sup>th</sup> carbons, wherein the substituents substituents are selected from the group consisting of hydroxy, oxo, halogen, amino, cyano, azido, cyclopropane, cyclopropene, epoxy and an unsubstituted C1-C2 carbon chain.

- 40. (Currently amended) The method of claim 31 wherein the C1-C2 carbon chain of R<sub>2</sub> is substituted and the substituents substituents are selected from the group consisting of: hydroxy, oxo, halogen, amino, cyano, azido, and epoxy.
- 41. (Currently amended) The method of claim 31 wherein the C1-C2 carbon chain of R<sub>2</sub> is substituted and the substituents substituents are selected from the group consisting of: hydroxy, oxo, halogen, azido, and amino.
- 42. (Previously presented) The method of claim 31 wherein the C1-C2 carbon chain of  $R_2$  is singly substituted.

#### 43-44. (Canceled)

- 45. (Previously presented) The method of claim 31 wherein R<sub>2</sub> is substituted only at one or both of 12<sup>th</sup> and 13<sup>th</sup> carbons counting from the carbonyl (C=O) carbon.
- 46. (Previously presented) The method of claim 45 wherein  $R_2$  is substituted only at the  $12^{th}$  carbon counting from the carbonyl (C=O) carbon.
- 47. (Previously presented) The method of claim 45 wherein  $R_2$  is substituted only at the  $13^{th}$  carbon counting from the carbonyl (C=O) carbon.

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48. (Currently amended) The method of claim 45 wherein within  $R_2$  the substituents substituents are polar and are selected from the group consisting of: hydroxy, oxo, epoxy, halogen, amino, cyano and azido.

- 49. (Currently amended) The method of claim 45 wherein within  $R_2$  the substituents substituents are hydrogen bond acceptors and are selected from the group consisting of: hydroxy, oxo, epoxy, amino, cyano and azido.
- 50. (Currently amended) The method of claim 45 wherein within R<sub>2</sub> the substituents substituents are selected from the group consisting of: hydroxy, oxo and epoxy.
- 51. (Currently amended) A method for control of unwanted nematodes, the method comprising administering to a vertebrate, plant, seed or soil a composition comprising:
- (a) a fatty acid or salt or an ester or amide or aldehyde or ketone of a compound selected from the group consisting of: ricinoleic acid, ricinelaidic acid, 12-oxo-9(Z)-octadecenoic acid, 12-oxo-9(E)-octadecenoic acid, (12,13)-epoxy-trans-9-octadecenoic acid and vernolic acid; and
  - (b) an aqueous surfactant.
- 52. (Previously presented) The method of claim 31 or claim 51 wherein the aqueous surfactant is selected from the group consisting of: ethyl lactate, Span 20, Span 40, Span 80, Span 85, Tween 20, Tween 40, Tween 80, Tween 85, Triton X 100, Makon 10, Igepal CO 630, Brij 35, Brij 97, Tergitol TMN 6, Dowfax 3B2, Physan and Toximul TA 15.
- 53. (Previously presented) The method of claim 31 or claim 51 wherein the composition further comprises:
- (c) a permeation enhancer.

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54. (Previously presented) The method of claim 53 wherein the permeation enhancer is a cyclodextrin.

- 55. (Previously presented) The method of claim 31 or claim 51 wherein the composition further comprises:
  - (c) a co-solvent.
- 56. (Previously presented) The method of claim 55 wherein the co-solvent is selected from the group consisting of: isopropanol, acetone, 1,2-propanediol, a petroleum based-oil and a mineral oil.
- 57. (Previously presented) The method of claim 31 or claim 51 further comprising a nematicide selected from the group consisting of: avermectins, milbemycin, aldicarb, oxamyl, fenamiphos, fosthiazate and metam sodium.
- 58. (Previously presented) The method of claim 31 or claim 51 further comprising an inhibitor of oxidation.
- 59. (Previously presented) The method of claim 31 or claim 51 wherein the inhibitor of oxidation is selected from the group consisting of: butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT).
- 60. (Previously presented) The method of claim 31 or claim 51 wherein the nematode infects plants and the composition is applied to the soil or to plants.
- 61. (Previously presented) The method of claim 60 wherein the composition is applied to soil before planting.

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62. (Previously presented) The method of claim 60 wherein the composition is applied to soil after planting.

- 63. (Previously presented) The method of claim 60 wherein the composition is applied to soil using a drip system.
- 64. (Previously presented) The method of claim 60 wherein the composition is applied to soil using a drench system.
- 65. (Previously presented) The method of claim 60 wherein the composition is applied to plant roots.
- 66. (Previously presented) The method of claim 60 wherein the composition is applied to seeds.
- 67. (Previously presented) The method of claim 31 or claim 51 wherein the nematode infects a vertebrate.
  - 68. (Previously presented) The method of claim 67 wherein the vertebrate is a mammal.
  - 69. (Previously presented) The method of claim 67 wherein the vertebrate is a bird.
- 70. (Previously presented) The method of claim 67 wherein the composition is administered to non-human mammal.
- 71. (Previously presented) The method of claim 67 wherein the composition is administered to a human.

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72. (Previously presented) The method of claim 67 wherein the composition is formulated as a drench to be administered to a non-human vertebrate.

- 73. (Previously presented) The method of claim 67 wherein the composition is formulated as an orally administered drug.
- 74. (Previously presented) The method of claim 67 wherein the composition is formulated as an injectable drug.

75-84. (Canceled)